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Date: November 12, 2004

In re Application of: Benayoun, et al. ***Filed:*** 12/04/2001

For: System for Routing Data Packets Through a Crossbar Switch in Expansion Mode

Serial Number: 09/683,231 ***Confirmation Number:*** 8295

Art Unit: 2667 ***Examiner:*** Daniel K. Lam

RESPONSE AND AMENDMENT UNDER 37 C.F.R. §1.111

Commissioner of Patents & Trademarks
Alexandria, VA 22313

Sir:

This is in response to the Office Action mailed on August 12, 2004, which is due for response by November 12, 2004. Any fees required in entering this response may be charged to Applicant's deposit account, 09-0456.

It is respectfully requested that this Amendment be entered in the above referenced application and reconsideration of the application in view of these comments be made. No new matter has been included. The application should be amended as follows:

Expansion_Grant signal (EXP-GRT) sent by the crossbar data switch, and control and generate the overflow mechanism.

[0052] (Previously Amended) At each synchronization pulse, the switch module analyzes the destination address of each incoming packet (according to the IO's pins configuration as shown in locations 2, 3, and 4 in Table 2) and compares it with its own range address as provided by the address configuration module 220 (Table 1). If the destination address falls within the range of the module, then the packet is output within a data-out block 204 of this latter, otherwise the packet is rerouted on the respective expansion data-out circuit 208 based on the packet bits configuration.

[0054] (Previously Amended) Referring to FIG. 8A, consider as an example where the configuration is a 3-module card connected together such as to be in the ports expansion mode and interconnecting 24 LAN's adapters. If the LAN adapter connected to port denoted 'S1' of first module 800 wants to send a frame to the LAN adapter connected to port 'Out-16' of second module 802, the LAN adapter splits the frame in '53 + 1 = 54' bytes packets wherein the header contains the final destination address ('Out-16' in the present example). The destination address byte of the packet incoming to port 'S1' of the first module is analyzed by the select data-in function and based on the configuration module reroutes the packet without the need of changing the destination switch module. In the present example the packet is rerouted to first expansion data-out block 209-1 of first module, and then sent to the first expansion data-in block 207-1 of second module where it is stored in the expansion memory 506 in order to be later processed by the crossbar mechanism of the crossbar data switch 210 of the second module to be switched to the appropriated output. As soon as the packet is stored into the expansion memory of the second module, the expansion mechanism sends a request for a connection signal to the crossbar data switch in order to request a connection to port 'Out-16'. The crossbar sends back an acknowledge signal in order to inform that the connection will be established at the synchronization pulse. At the next synchronization pulse, the expansion-in function puts the appropriate data onto the expansion-mux-bus 214-1 and the packet is transferred through the crossbar data switch to the destination data-out block 205-8 to be sent finally to the connected LAN adapter.